## REMARKS

This Response is submitted in reply to the non-final Office Action mailed on May 25, 2011. The Director is authorized to charge any fees that may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 3712036-00751 on the account statement.

Claims 1-10 and 26-31 are pending in the application. Claims 11-25 were previously canceled without prejudice or disclaimer. In the Office Action, Claims 1-10 and 26-31 are rejected under 35 U.S.C. §103. For at least the reasons set forth below, Applicants respectfully traverse the rejections and request that the rejections be reconsidered and withdrawn.

In the Office Action, Claims 1-4 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Viennese NPL ("*Viennese*") in view of DE 10223444 to Guenou ("*Guenou*") and U.S. Publication No. 2002/0130137 to Greenwald ("*Greenwald*"). Applicants respectfully traverse the rejection for at least the reasons set forth below.

Independent Claim 1 recites, in part, commanding, via the control and command means, said heating means associated with said support to heat said quantity of alimentary liquid to a predetermined temperature while commanding said driving means for said mechanical stirring means at a first predetermined stirring speed being insufficient to generate foaming of the heated alimentary liquid; and commanding, via the control and command means said mechanical stirring means for stirring said quantity of liquid at a second predetermined stirring speed generating foaming of the heated alimentary liquid. Independent Claim 26 recites, in part, heating the alimentary liquid comprising milk to a predetermined temperature while stirring the liquid with stirring means at a first predetermined stirring speed being insufficient to generate foaming of the heated alimentary liquid; and stirring said liquid with stirring means at a second predetermined stirring speed ranging generating foaming of the heated alimentary liquid.

Because foam is a thermal insulator that could slow down the temperature increase of the liquid, it is thus important to ensure that foam does not form before the alimentary liquid has reached the optimum foam forming temperature, for example, typically comprised between 60 °C and 70 °C in the case of milk. Applicants have found that simultaneously stirring and heating the alimentary liquid **comprising milk** at a speed, typically of the order of 500 to 1500 rpm,

lower than a stirring speed necessary to generate foam in the alimentary liquid brings the entire volume of the heated alimentary liquid to the optimum foam forming temperature more quickly.

The second predetermined speed is at least twice, preferably three times higher than the first predetermined speed to generate foaming in the alimentary liquid. The first predetermined speed range is chosen so that a forced convection mode is carried out in the liquid that promotes a more rapid rise of temperature in the liquid but is still low enough to not form foam that would act as a thermal insulator. The second predetermined stirring speed range is selected so that the alimentary liquid that has substantially reached its optimum foam forming temperature level can be changed rapidly into a foam.

In an embodiment, the claimed methods can advantageously enable foam to be prepared quickly (i.e., within a few seconds only) from a determined quantity of the alimentary liquid using a mechanical stirring device of simple and economical construction that does not use steam. Thus, the claimed methods eliminate the drawbacks of the prior art devices with respect to the production of steam. Because the device for implementing the presently claimed methods can be made separately from a coffee machine, it is possible to prepare the coffee and the foam simultaneously. See, specification, page 3, lines 4-9.

Additionally, the method according to Claim 1 includes the use of a control and command means that may be used to advantageously control both the change of rotational direction of the rotating stirring means and the frequency of the changes. This is achieved by pre-programming a microcontroller with a program that is capable of running various stirring and heating programs depending on a desired container capacity. See, specification, page 4, line 36-page 5, line 12. Indeed, the specification states that "control means 24 comprise a microcontroller connected to motor 18 and to the heating element, and suitably programmed for controlling one or more foam producing cycles as a function of the quantity of liquid to be foamed." See, specification, page 7, lines 13-31. Applicants respectfully submit that the cited references are deficient with respect to the present claims.

*Viennese*, *Guenou* and *Greenwald,* alone or in combination, fail to disclose or suggest each and every element of independent Claims 1 and 26. *Viennese*, *Guenou* and *Greenwald,* alone or in combination, fail to disclose or suggest commanding said driving means for said mechanical stirring means at a first predetermined stirring speed being insufficient to generate

foaming of the heated alimentary liquid comprising milk as required by independent Claim 1. *Viennese*, *Guenou* and *Greenwald,* alone or in combination, also fail to disclose or suggest commanding, via the control and command means said mechanical stirring means for stirring said quantity of liquid at a second predetermined stirring speed generating foaming of the heated alimentary liquid comprising milk as required by independent Claim 1. *Viennese*, *Guenou* and *Greenwald,* alone or in combination, also fail to disclose or suggest heating the alimentary liquid comprising milk to a predetermined temperature while stirring, or stirring a liquid using stirring means at the recited first or second predetermined stirring speed ranges in accordance with independent Claim 26.

*Viennese* discloses a method for making Viennese coffee by adding certain ingredients such as light cream and heavy cream during certain steps. See *Viennese*. The Patent Office even admits that *Viennese* fails to disclose or suggest heating an alimentary liquid comprising milk while stirring. See Office Action, page 3, lines 9-11. In addition to failing to disclose or suggest heating an alimentary liquid comprising milk while stirring, *Viennese* also fails to disclose or suggest mechanically stirring at a first predetermined stirring speed and being insufficient to generate foaming of the heated alimentary liquid comprising milk, or mechanically stirring at a second predetermined stirring speed and generating foaming of the heated alimentary liquid comprising milk in accordance with independent Claims 1 and 26. For example, foaming milk is distinguishable from beating a cream.

*Guenou* discloses a food stirrer that uses controls to set the stirrer speed and the heating plate temperature. See, *Guenou*, Abstract. As shown by Figure 3, however, the "controls" of *Guenou* are manual controls that may be set by a user to control the stirrer speed and heating plate temperature. See, *Guenou*, Figure 3. At no place in the disclosure, however, does *Guenou* disclose or suggest any of heating the alimentary liquid comprising milk to a predetermined temperature while stirring, or stirring a liquid using stirring means at the recited first or second predetermined stirring speed ranges, or commanding a device using control and command means in accordance with independent Claim 1. Further, at no place in the disclosure does *Guenou* disclose or suggest any of heating the alimentary liquid comprising milk to a predetermined temperature while stirring, or stirring a liquid using stirring means at the recited first or second predetermined stirring speed ranges in accordance with independent Claim 26.

*Greenwald* discloses using a controller to set a position of a valve to mix both hot and cold coffee to dispense a final coffee product at a desired and predetermined temperature. See *Greenwald*, Abstract; page 6, paragraphs 76-90. At no place in the disclosure, however, does *Greenwald* disclose or suggest any of heating the alimentary liquid to a predetermined temperature while stirring, or stirring a liquid using stirring means at the recited first or second predetermined stirring speed ranges, or commanding a device using control and command means in accordance with independent Claim 1. Further, at no place in the disclosure does *Greenwald* disclose or suggest any of heating the alimentary liquid to a predetermined temperature while stirring, or stirring a liquid using stirring means at the recited first or second predetermined stirring speed ranges in accordance with independent Claim 26.

Applicants further respectfully submit that the skilled artisan would have no reason to modify *Viennese* with *Guenou* and *Greenwald* to arrive at the present claims in the absence of hindsight. As detailed above, independent Claims 1 and 26 are directed to methods of preparing foam from a milk-based liquid that enable form to be prepared quickly (i.e., within a few seconds only) from a determined quantity of liquid using a mechanical stirring device of simple and economical construction that does not use steam. Thus, the methods eliminate the drawbacks of the prior art devices with respect to the production of steam. Because the device for implementing the presently claimed methods can be made separately from a coffee machine, it is possible to prepare the coffee and the foam simultaneously. See, specification, page 3, lines 4-9. In contrast, *Viennese* merely discloses the steps and ingredients for producing *Viennese* coffee including light and heavy cream and does not even suggest specific devices or means for producing the coffee, let alone specific temperatures, the stirring means or the first and second predetermined stirring speed ranges of the present claims. Further, the controller of *Greenwald* is not even configured to control heating and stirring in accordance with Claim 1, and *Guenou* simply discloses a standard mixer with no thought as to forming foam in an alimentary liquid comprising milk. As such, Applicants respectfully submit that the inventive leap required by the skilled artisan to modify *Viennese* with *Guenou* and *Greenwald* to arrive at the present claims is tenuous at best.

Further, Applicants also respectfully submit that, if the Patent Office could combine references to arrive at the present claims simply because each reference suggests an element of

the present claims, then every invention would effectively be rendered obvious. For example, the mere fact that *Viennese* discloses stirring and beating ingredients, *Guenou* discloses a device for stirring and heating a mixture, and *Greenwald* discloses a controller for controlling the dispensing temperature of a coffee, does not mean that the recognition of a method involving providing controlling the heating and stirring speed using a specific control means and specific first and second predetermined stirring speed ranges is necessarily *prima facie* obvious. Indeed, the controller of *Greenwald* is not even configured to control heating and stirring according to Claim 1, and the device of *Guenou* is simply a standard mixer.

What the Patent Office has done is to rely on hindsight reconstruction of the claimed invention. Applicants respectfully submit that it is only with a hindsight reconstruction of Applicants' claimed invention that the Patent Office is able to even attempt to piece together the teachings of the prior art so that the claimed invention is allegedly rendered obvious. Instead, the claims must be viewed as a whole as defined by the claimed invention and not dissected into discrete elements to be analyzed in isolation. *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983); *In re Ochiai*, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995). One should not use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d at 1075. (Fed. Cir. 1988).

For at least the reasons set forth above, Applicants respectfully submit that the cited references fails to disclose or suggest each and every element of independent Claims 1 and 16. Moreover, the cited references fail to teach, suggest or even recognize the advantages and benefits of a method of preparing foam from a milk-based alimentary liquid for preparing a drink using a device according to Claims 1 and 26. As a result, independent Claims 1 and 26, along with any of the claims that depend from same, are novel and non-obvious over the cited references.

In the Office Action, Claims 5-7 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Viennese* in view of *Guenou*, *Greenwald* and U.S. Patent No. 6,283,625 to Frankel ("*Frankel*"). Claims 8-10 and 27-31 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Viennese* in view of *Guenou*, *Greenwald*, *Frankel*, U.S. Patent No. 4,537,332 to Brown ("*Brown*") and U.S. Patent No. 5,374,444 to Langer ("*Langer*"). Applicants

respectfully submit that the patentability of Claim 1 as previously discussed renders moot the obviousness rejection of Claims 5-7 and 8-10 that depend from Claim 1. More specifically, the cited references alone or in combination fail to disclose or suggest commanding said driving means for said mechanical stirring means at a first predetermined stirring speed being insufficient to generate foaming of the heated alimentary liquid comprising milk as required by independent Claim 1. The cited references, alone or in combination, also fail to disclose or suggest commanding, via the control and command means said mechanical stirring means for stirring said quantity of liquid at a second predetermined stirring speed ranging generating foaming of the heated alimentary liquid comprising milk as required by independent Claim 1. In this regard, the cited references fail to teach or suggest the elements of Claims 5-7 and 8-10 in combination with the novel elements of Claim 1.

Accordingly, Applicants respectfully request that the obviousness rejections of Claims 5-7 and 8-10 be reconsidered and withdrawn.

Independent Claim 28 recites, in part, a method comprising commanding, via the control and command means, said heating means associated with said support to heat said quantity of alimentary liquid to a predetermined temperature while commanding said driving means for said mechanical stirring means at a first predetermined stirring speed of up to 1500 rpm and being insufficient to generate foaming of the heated alimentary liquid, and commanding, via the control and command means said mechanical stirring means for stirring said quantity of liquid at a second predetermined stirring speed of at least 3000 rpm and generating foaming of the heated alimentary liquid. Independent Claim 30 recites, in part, a method comprising heating the alimentary liquid to a predetermined temperature while stirring the liquid with stirring means at a first predetermined stirring speed ranging of up to 1500 rpm and being insufficient to generate foaming of the heated alimentary liquid, and stirring said liquid with stirring means at a second predetermined stirring speed of at least 3000 rpm and generating foaming of the heated alimentary liquid. Applicants respectfully submit that the cited references are deficient with respect to the present claims.

*Viennese*, *Guenou* and *Greenwald,* alone or in combination, fail to disclose or suggest each and every element of independent Claims 28 and 30. As discussed above, *Viennese*, *Guenou* and *Greenwald,* alone or in combination, fail to disclose or suggest commanding said

driving means for said mechanical stirring means at a first predetermined stirring speed of up to 1500 rpm and being insufficient to generate foaming of the heated alimentary liquid comprising milk as required by independent Claim 28. *Viennese*, *Guenou* and *Greenwald,* alone or in combination, also fail to disclose or suggest commanding, via the control and command means said mechanical stirring means for stirring said quantity of liquid at a second predetermined stirring speed of at least 3000 rpm and generating foaming of the heated alimentary liquid comprising milk as required by independent Claim 28. *Viennese*, *Guenou* and *Greenwald,* alone or in combination, also fail to disclose or suggest heating the alimentary liquid to a predetermined temperature while stirring, or stirring a liquid using stirring means at the recited first or second predetermined stirring speed ranges in accordance with independent Claim 30.

Applicants further submit that *Frankel*, *Brown*, and *Langer* fail to remedy the deficiencies of *Viennese*, *Guenou* and *Greenwald* because *Frankel*, *Brown* and *Langer* also fail to disclose or suggest commanding said driving means for said mechanical stirring means at a first predetermined stirring speed of up to 1500 rpm and being insufficient to generate foaming of the heated alimentary liquid comprising milk as required by independent Claim 28. *Frankel*, *Brown* and *Langer* alone or in combination also fail to disclose or suggest commanding, via the control and command means said mechanical stirring means for stirring said quantity of liquid at a second predetermined stirring speed of at least 3000 rpm and generating foaming of the heated alimentary liquid comprising milk as required by independent Claim 28. *Frankel*, *Brown* and *Langer* alone or in combination also fail to disclose or suggest heating the alimentary liquid to a predetermined temperature while stirring, or stirring a liquid using stirring means at the recited first or second predetermined stirring speed ranges in accordance with independent Claim 30.

Instead, *Frankel* is entirely directed to an apparatus to automatically heat and froth milk for beverages. See, *Frankel*, Abstract. To achieve frothed milk for beverages, a lower paddle of Frankel moves counter clockwise and an upper paddle moves clockwise. See, *Frankel*, column 3, line 55-column 4, line 2. At no place in the disclosure does *Frankel* disclosure or suggest first or second predetermined speeds, heating the alimentary liquid to a predetermined temperature while stirring, a first speed insufficient to generate foaming of the liquid, or a second speed for generating foaming of the liquid.

*Brown* is entirely directed to a non-carbonated beverage dispenser having an in-bowl whipper assembly that includes a magnetically driven impeller. See, *Brown*, Abstract. Although *Brown* discloses the use of one speed (e.g., 4000 to 8000 rpm) to rotate the drive magnet, see, *Brown*, column 4, line 65-column 5, line 1, *Brown* fails to disclosure or suggest first or second predetermined speeds, heating the alimentary liquid to a predetermined temperature while stirring, a first speed insufficient to generate foaming of the liquid, or a second speed for generating foaming of the liquid.

*Langer* is entirely directed to dietary fiber supplements in beverage and liquid concentrate liquid dosage forms wherein the dietary fiber source is cellulose ether. See, *Langer*, Abstract. Although *Langer* discloses the use of a stirring speed of 200 to 1000 rpm, see, *Langer*, column 3, lines 23-29, *Langer* fails to disclosure or suggest first or second predetermined speeds, heating the alimentary liquid to a predetermined temperature while stirring, a first speed insufficient to generate foaming of the liquid, or a second speed for generating foaming of the liquid.

Applicants also respectfully submit that the skilled artisan would have no reason to combine *Viennese*, *Guenou*, *Greenwald*, *Frankel*, *Brown* and *Langer* because the cited references are directed to unrelated products that have completely different objectives. For example, *Viennese* discloses a method for making Viennese coffee by adding certain ingredients such as light cream and heavy cream during certain steps. See *Viennese*. *Guenou* discloses a food stirrer that uses controls to set the stirrer speed and the heating plate temperature. See *Guenou*, Abstract. *Greenwald* discloses using a controller to set a position of a valve to mix both hot and cold coffee to dispense a final coffee product at a desired and predetermined temperature. See *Greenwald*, Abstract; page 6, paragraphs 76-90. *Frankel* is entirely directed to an apparatus to automatically heat and froth milk for beverages. See, *Frankel*, Abstract. *Brown* is entirely directed to a non-carbonated beverage dispenser having an in-bowl whipper assembly that includes a magnetically driven impeller. See, *Brown*, Abstract. *Langer* is entirely directed to dietary fiber supplements in beverage and liquid concentrate liquid dosage forms wherein the dietary fiber source is cellulose ether. See, *Langer*, Abstract. As such, the cited references are directed to unrelated products that have completely different objectives.

Additionally, as mentioned above, Applicants submit that if the Patent Office could combine references to arrive at the present claims simply because each reference suggests an element of the present claims then every invention would effectively be rendered obvious. For example, the mere fact that *Viennese* discloses stirring and beating ingredients, *Guenou* discloses a device for stirring and heating a mixture, and *Greenwald* discloses a controller for controlling the dispensing temperature of a coffee, does not mean that the recognition of a method involving providing controlling the heating and stirring speed using a specific control means and specific first and second predetermined stirring speed ranges is necessarily *prima facie* obvious. Indeed, the controller of *Greenwald* is not even configured to control heating and stirring according to Claim 1, the device of *Guenou* is simply a standard mixer, and the cellulose ether dietary fiber supplements of *Langer* are not even remotely related to the presently claimed methods for preparing foam from a milk-based alimentary liquid.

Applicants respectfully submit that it is only with a hindsight reconstruction of Applicants' claimed invention that the Patent Office is able to even attempt to piece together the teachings of the prior art so that the claimed invention is allegedly rendered obvious. However, the claims must be viewed as a whole as defined by the claimed invention and not dissected into discrete elements to be analyzed in isolation. *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983); *In re Ochiai*, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995). One should not use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d at 1075. (Fed. Cir. 1988). Therefore, for at least the above-mentioned reasons, Applicants respectfully submit that the cited references are deficient with respect to the present claims.

Accordingly, Applicants respectfully request that the obviousness rejections of Claims 27-31 be reconsidered and withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly request an early allowance of the same. In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

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